We claim as our invention:

1) A solenoid-based propulsion system comprising:
   A) at least one multiple wire coil set solenoid;
   B) a magnetic object, at least a portion of which reciprocally moves within the multiple wire coil set solenoid; and
   D) an energizing control system connected to multiple wire coil sets of the solenoid that controls the dwell angle for each wire coil set.

2) A solenoid-based propulsion system of claim 1 wherein the dwell angle for each wire coil set of the multiple wire coil set solenoid is adjustable.

3) A solenoid-based propulsion system of claim 1 wherein the dwell angles are different for each wire coil set of a multiple wire coil set solenoid.

4) A solenoid-based propulsion system of claim 1 wherein the energy control system is comprised of an electronic timer to coordinate the energizing of the wire coil sets.

5) A solenoid-based propulsion system of claim 1, wherein the energizing control system skip energizes selected wire coil sets at selected times

6) A solenoid-based propulsion system of claim 1, wherein the multiple wire coil set solenoid has an opened ended tube through which the magnetic object will be unilaterally and completely propelled out of tube when all the wire coil sets are de-energized.

7) A solenoid-based propulsion system of claim 6, wherein the wire coil set closest to the open end of the tube is the last to be de-energized.

8) A solenoid-based propulsion system of claim 1 wherein the one multiple wire coil set solenoid contains a centering magnet.

9) A solenoid-based propulsion system of claim 1 wherein the energizing control system is comprised of an audio signal generator that energizes the wire coil sets.

10) A solenoid-based propulsion system comprising:
   A) at least one tube with an exterior and an interior;
   B) multiple wire coil sets wrapped around the exterior of the tube;
   C) a magnetic object which reciprocally moves within at least a portion of the interior of the tube; and

D) an energy control system connected to wire coil sets of the multiple wire coil set solenoid that skip energizes select wire coil sets at selected times.

11) A solenoid-based propulsion system of claim 1, wherein the energy control system controls the dwell angle of energized wire coil sets.

12) A solenoid-based propulsion system of claim 1, wherein the energy control system is further comprised of an audio signal generator that energizes the wire coil sets.

13) A solenoid-based propulsion system of claim 1, wherein water and air tight compartments contain the energizing control system and wire coil sets while the interior of the tube and the magnetic object connected to a conversion mechanism are vented to the outside atmosphere.

14) A methodology for operating a solenoid-based propulsion system comprising:

A) placing an magnetic object inside an open ended tube that has at least one multiple wire coil solenoid wrapped around it exterior;

B) centering the magnetic object within the midpoint of its reciprocal movement

C) alternatively energizing the wire coil sets of the multiple wire coil solenoid;

C) reciprocally moving the magnetic object in a reciprocal movement.

15) A methodology for solenoid-based propulsion of claim 15 wherein the additional step of activating the trigger switch unilaterally propels the magnetic object out of the open end of the tube.

16) A methodology for solenoid-based propulsion of claim 15 wherein activating of a trigger switch that stops the reciprocal movement of the magnetic object to unilaterally propel the magnetic object totally out through the muzzle of the tube.

17) A methodology for solenoid-based propulsion of claim 14 wherein the additional step of activating a frequency signal generator

18) A methodology for solenoid-based propulsion of claim 14 wherein the additional step is adjusting the propulsion magnet.

19) A methodology for solenoid-based propulsion of claim 15 wherein the additional step is adjusting the dwell angles for the wire coil sets.

20) A methodology for solenoid-based propulsion of claim 15 wherein the additional step is adjusting the dwell angles for the wire coil sets.